

Abstract

To Evaluate the Effect of Consuming Soy Products on the Rate of Fall in Serum Oestrogen Level in Post TAHBSO Women on Oestrogen Implant

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Objective:

To compare the rate of fall of serum oestrogen level in post total abdominal hysterectomy and bilateral salpingo-oophorectomy (TAHBSO) women on oestradiol implant with or without intake of soya bean products.

Methods:

This was a prospective comparative study which was undertaken from January, 2008 to May, 2012. A total of 35 women, who had undergone TAHBSO for benign gynaecological conditions, were each inserted with a 50 mg oestradiol implant in the sub-rectus space intra-operatively. Serum oestradiol levels were measured on a two-monthly basis until the level fell below 50 pmol/litre and the patients have developed post-menopausal symptoms. A second 50 mg oestradiol implant was then inserted as out-patients in either of the lumbar region of the abdomen using a special trocar. These patients were then advised to consume at least one glass of soya products every day. Serum oestradiol levels were again measured on a two-monthly basis until the level fell below 50 pmol/litre and the patients have developed post-menopausal symptoms. The means of each two monthly intervals were compared using the comparisons of means to determine whether there was any difference in the rate of fall of the oestrogen levels with or without soy product intake.

Results:

Serumoestradiol level in the patients on oestradiol implants were noted to fall more slowly when they were consuming soya products regularly as compared to when they were not taking any soy product at all. Without soy product intake, the serum oestradiol level fell down to less than 50pmol/l in around 14 months. However, with regular soy product intake, the oestradiol level fell more slowly and took around 20 months to reach <50 pmol/l. The oestradiol level subsequently plateaued between 30 to 50pmol/l up to 26 months following insertion of the implant.

Conclusion:

The serum oestradiol level (E2) in post TAHBSO women with oestradiol implant and regular soya products intake reduced significantly more slowly and lasted much longer as compared to those not consuming the soy product.